

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR

LYNDO TIPPETT **SECRETARY**

December 5, 2003

U.S. Army Corps of Engineers Raleigh Regulatory Field Office 6508 Falls of Neuse Road Suite 120 Raleigh, NC 27615

ATTN:

Mr. Eric Alsmeyer

NCDOT Coordinator

Dear Sir:

SUBJECT:

Permit Modification Request for TIP No. R-2906C, Wake County,

Federal Aid No. HPSTP-55(12), State Project No. 8.1403901, \$200 Debit

WBS Element 34514.1.1

REFERENCE: USACE Permit, Action ID: 200120353, dated June 19, 2001

USACE Permit modification, dated January 22, 2003

DWO WOC 010120, dated March 13, 2001 DWO WQC 010120mod, dated January 6, 2003 DWQ WQC 010120mod, dated July 8, 2003

DWQ WQC 010120mod, dated November 21, 2003

The North Carolina Department of Transportation (NCDOT) proposes to modify the construction plans for the abovementioned project. NCDOT proposes to construct a temporary diversion channel to the north of Martin Luther King Boulevard.

The purpose of this letter is to request modifications to the CWA Section 404 Permit issued by the USACE and the 401 Water Quality Certification issued by the NC Division of Water Quality. This change addresses temporary diversion channel construction. Revised construction plans (Sheet 22) are attached.

The revised design does not compromise NCDOT's compliance with the existing permit conditions. No additional mitigation is proposed. The new impact sites have been evaluated for compliance with the avoidance/minimization criteria and are in compliance with all previous Individual Permit factors, including the following:

TELEPHONE: 919-733-3141 FAX: 919-733-9794

WEBSITE: WWW.DOH.DOT.STATE.NC.US

- Protected Species,
- Cultural Resources,
- Aquatic Life passage,
- FEMA compliance, and
- Utilities.

R-2906C, permit drawing sheets 45 and 46 of 52, Sites AF, AH, AI, and AJ, Station Y47 17+65 to 22+19 left

The construction of this temporary channel will allow for the proposed channel relocation (approximate station 17+65 to 22+19 right of Y47) as well as the proposed culvert extensions (approximate station 17+65 right and left of Y47) to be constructed while in the dry. The diversion will be lined with fabric and rock and the far side of the creek at the outlet end will be stabilized with rock or coir fiber. A stilling basin on the left side of the road will be used to pump around while the culverts are extended. The diversion channel will be in use for approximately 5 months.

The dimensions of the proposed temporary channel are as follows:

Length: 440 ft
Top of channel width: 15 ft
Bottom of channel width: 3 ft
Side slopes: 2:1

The area disturbed will be approximately 733 yd². The total excavation will be approximately 440 yd³. The amount of fabric that will line the temporary channel will be approximately 803 yd². Approximately 0.01 ac of wetlands will be impacted as a result of this action.

Phase I

- 1. Relocate unnamed tributary to Northeast Creek, North Prong from the existing outlet of the 3 @ 12ft x 8ft RCBC to the confluence of Northeast Creek, North Prong. Divert water from the existing channel into the proposed channel using impervious dikes 1, 2, 3, and 4.
- 2. Utilize existing (old) channel as stilling basin 1 (325 yd³) and construct stilling basin 3 (425 yd³).
- 3. Construct impervious dikes 5, 6, 7, 8, 9, and 10.
- 4. Construct impervious dikes 11 and 13, and 30in temporary pipe A. Construct impervious dikes 12 and 14, and 30in temporary pipe B.
- 5. Construct downstream culvert extensions and outlet channel improvements for both culverts.
- 6. Remove impervious dikes 1-4 and 11-14, 30in temporary pipes A and B, and stilling basins 1 and 3.

Phase II

1. Construct stilling basin 2 (80 yd³) and stilling basin 4 (150 yd³).

- 2. Construct impervious dikes 15 and 17, and 30in temporary pipe C. Construct impervious dikes 16 and 18, and 30in temporary pipe D.
- 3. Construct upstream culvert extensions and inlet channel improvements for both culverts.
- 4. Complete roadway.

The NCDOT respectfully requests that the referenced 404 USACE Permit and 401 Water Quality Certification be modified to reflect the revisions outlined in this letter. In compliance with Section 143-215.3D(e) of the NCAC we will provide \$200 to act as payment for processing the Section 401 permit modification application previously noted in this application (see Subject line). We are providing seven copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for their review. If you have any questions or need additional information, please contact Matt Haney at (919) 715-1428.

Respectfully,

Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

Mr. David Franklin, COE, Wilmington (Cover Letter only) Cc:

Mr. John Dorney, DWQ Raleigh (7 copies)

Mr. Travis Wilson, NCWRC

Ms. Kathy Matthews, EPA

Mr. Gary Jordan, USFWS

Mr. John F. Sullivan, III, FHWA

Mr. Jay Bennett, P.E., Roadway Design

Mr. Omar Sultan, Programming and TIP

Ms. Debbie Barbour, P.E., Design Services

Mr. David Chang, P.E., Hydraulics

Mr. Greg Perfetti, P.E., Structure Design

Mr. Ron Wilkins, P.E., Design Services ROW

Mr. Mark Staley, Roadside Environmental

Mr. J.G. Nance, P.E., Division 5 Engineer

Mr. Wiley Jones, III, P.E., Division 5 Resident Engineer

Mr. Chris Murray, Division 5 Environmental Officer

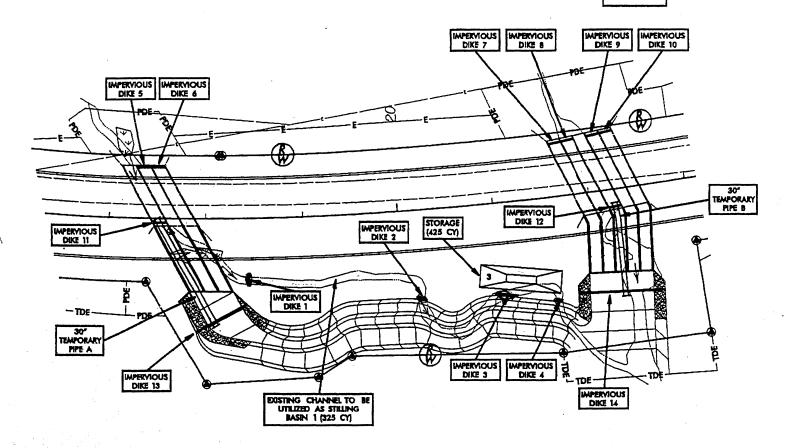
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Attachments:

Revised construction plans

CULVERT CONSTRUCTION SEQUENCE (SIA. 22 + 18.58 & 1/ + 05.02 -14/-)

PHASE I



- 1. RELOCATE THE NORTHEAST CREEK NORTH PRONG, TRIBUTARY A CHANNEL FROM THE EXISTING OUTLET OF THE 3 @ 12' X 8' RCBC TO THE CONFLUENCE OF NORTHEAST CREEK, NORTH PRONG. DIVERT WATER FROM THE EXISTING CHANNEL INTO THE PROPOSED CHANNEL USING IMPERVIOUS DIKES
- 1, 2, 3, AND 4.

 2. UTILIZE EDISTING (OLD) CHANNEL AS STILLING BASIN 1 (325 CY) AND CONSTRUCT STILLING BASIN 3
- 2. UNIDEE EXSTRUCT SOLD CHARMEL AS STILLING BASIN 1 (325 CT) AND CONSTRUCT STILLING BASIN 3 (425 CT).

 3. CONSTRUCT IMPERVIOUS DIRES 5, 6, 7, 8, 9, AND 10.

 4. CONSTRUCT IMPERVIOUS DIRES 11 AND 13, AND 30" TEMPORARY PIPE A. CONSTRUCT IMPERVIOUS DIRES 12 AND 14, AND 30" TEMPORARY PIPE B.

 5. CONSTRUCT DOWNSTREAM CULYERT EXTENSIONS AND OUTLET CHANNEL IMPROVEMENTS FOR BOTH CULYERS.
- 6. REMOVE IMPERVIOUS DIKES 1 4 AND 11 14, 30" TEMPORARY MIPS A AND 8, AND STILLING BASINS 1 AND 3.

PHASE II IMPERVIOUS DIKE IMPERVIOUS DIKE IMPERVIOUS DIKE 18 IMPERVIOUS IMPERVIOUS DIKE 10 IMPERMOUS IMPERMOUS DIKE 8 TEMPORARY DIVERSION IMPERVIOUS DIKE 17 STORAGE (150 CY) TEMPORARY PIPE D STORAGE (80 CY) IMPERVIOUS DIKE 15

- BY CONSTRUCTION OF TEMPORARY DIVERSION

- CHANNEL RELOCATION AND CULVERT EXTENSION CAN BE CONSTRUCTED IN DRY.

- 7. CONSTRUCT STILLING BASIN 2 (80 CY) AND STILLING BASIN 4 (150 CY).
 8. CONSTRUCT IMPERMOUS DIKES 15 AND 17, AND 30" TEMPORARY PIPE C. CONSTRUCT IMPERMOUS DIKES 16 AND 18, AND 30" TEMPORARY PIPE D.
- 9. CONSTRUCT UPSTREAM CULVERT EXTENSIONS AND INLET CHANNEL IMPROVEMENTS POR BOTH CULVERTS.
 10. COMPLETE ROADWAY.

TEMPORARY DIVERSION DETAIL

